

## Glenda Wiles

**From:** John.Styba@faa.gov  
**Sent:** Wednesday, November 26, 2008 10:27 AM  
**To:** Allen Rickman; Bailey Egan; Beau Bradley; Beverly J.Nile; Bill Arvin; Bill Beehler; Bill Galt; Bill Solem; Bob Breum; Bob Hermance; BradSchmidt; Bryce Lambert; Carlo Porteen; Carol Brooker; Charles Trower; Chuck Lee; City of Choteau; Connie Ternes-Daniels; County of Broadwater; County of Blaine; County of Fallon; County of Fergus; County of Gallatin; County of Glacier; County of Granite; County of Judith Basin; County of Lake; County of Liberty; County of Madison; County of Meagher; County of McCone; County of Musselshell; County of Pondera; Glenda Wiles; County of Roosevelt; County of Sheridan; County of Stillwater; County of Toole; County of Teton; County of Wheatland; Craig Eaton; Cris Brown; Curt Hershberger; Dale Gallis; Dallas O'Connor; Dan Lilja; Dan Minnis; Dan Watson; Darrell Morehouse; Dave Heddich; David Anderson; David Boyd; David Pippin; Dave Ries; Debbie Alke; Delbert Schwaderer; Dennis DeVivo; Dixon Hitch; Don Misevic; Doug Parrott; Dwight Thompson; Ernie Carlson; Fred Hasskamp; Fred Leistiko; Garth Haugland; George Wood; Glenda Wiles; Gordon Oelkers; Harvey Worrall; Jake Barthule; James Patrick; Janice Hoppes; Jeannette Charbonneau; Jerri Miller; Jerry Larson; Jerry Moline; Jim Durgan; Jim Briden; Jim Greil; Jim Novak; Jim Trowbridge; Joan K. Stahl; Joe Morse; Joe Whalen; John Hauck; John Smith; Judy Stang; Julie Jordan; Karen Amende; Kerry LaDuke; Kathy Bessette; Kent Wasson; Kimberly Bates; LaDonna Vietti; Larry Lekse; Leland Blatter; Leon Baker; Leroy Hoversland; Lonnie Link; Lowell Swenson; Mary Lynch; Mary Alice Upton; Mike Campbell; Mike Hutchin; Mike McGinley; Mike Rogan; Nancy Espy; Orville Moore; Page Gough; Puala Polizzi; Patti Odaz; Perry Breitbach; Raedelle Aspenlieder; Rebecca Guay; Rick Isle; Rick Knick; Rhea Brutosky; Robert Byran; Ron Coleman; Ron Kelly; Steve Becker; Steve Hampton; Steve Layton; Steve Powers; Steve Powers; Teton County Airport Commission; Theresa Murray; Tom Miller; Tom Rice; Tony Bean; Tony Berget; Tony Pfaff; Town Of Circle; "Town Of Columbus <rdbtoc@in-tch.com/@faa.gov>,"Town of Stevensville" <townofstevensville@hotmail.com>,"William Edwards" <rndp@midrivers.com>,"Willis Bartholomay" <wbartho@midrivers.com>  
**Subject:** Fw: INFORMATION:Turning off VGSI, NAVAIDS equipment in Abnormal Airport Environments

**Attachments:** NAVAIDS AAE.pdf; VGSI AAE.pdf

**RECEIVED**



NAVAIDS AAE.pdf (244 KB)



VGSI AAE.pdf (243 KB)

**NOV 26 2008**

**Ravalli County Commissioners**

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**TO:** Montana Sponsors and Consultants

Here's some information that will be helpful next time you plan to shut down your runway for construction needs. We track the need for these type of planned events and will need the estimated dates of shutdowns well in advance (including the refined dates as that information develops).

Thanks,

John W. Styba  
Civil Engineer  
Helena Airports District Office, HLN-620 Federal Aviation Administration  
2725 Skyway Drive, Ste 2  
Helena, MT 59602  
(406) 449-5279

----- Forwarded by John Styba/ANM/FAA on 11/26/2008 10:26 AM -----

Paul  
Johnson/ANM/FAA  
ANM-SEA-ADO, To  
Seattle, WA 'ANM-ARP-ALL-FAA@FAA  
cc

11/24/2008 08:37 Subject  
AM INFORMATION:Turning off VGSI,  
NAVAIDS equipment in Abnormal  
Airport Environments(Document link:  
John Styba)

The Memorandums attached below address deactivation of Localizers, Glide Slopes, and Visual glide Slope Indicators (VGSI) when runways are temporarily closed or thresholds moved for construction . These Memorandums have also been sent to the System Support Managers and employees. Calvin Ngo, Operations Engineer/Nav aids Support Center Manager initiated these Memorandums to clarify when these navigational aids need to be taken off line.

When a runway threshold is temporarily displaced or relocated the Glide Slope must be turned off and a NOTAM issues by the System Support Center (SSC) personnel.

When a runway is closed the ILS Localizer must be turned off with the exception when there would be a procedural benefit for the Localizer to remain on. This determination will be made by Calvin Ngo during the review of the construction plans. Calvin will coordinate and get agreement with Flight Standards, Flight Procedures, and Terminal Services.

When a runway is closed or the thresholds are temporarily displaced or relocated for construction, the VGSI must be turned off or covered by the SSC if owned by the FAA. If the VGSI is owned by the airport they must cover or deactivate.

Project Mangers only need to submit the plans during the normal airspace process to Operational Engineering as we are currently doing. Operational Engineering will review and make the determination if there is an operational benefit to leave the Localizer. They will also respond with the names of SCC personnel that will deactivate FAA navigational aids.

Paul Johnson P.E.  
Northwest Mountain Region  
Safety and Standards Branch (ANM-622)  
(425) 227-2622



## Federal Aviation Administration

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### Memorandum

Date: NOV 17 2008

To: Managers, District Offices, Technical Services, Technical Operations, Western Service Area (WSA)

From: Manager, Engineering Services, Technical Operations, WSA *R. Kitzer*

Subject: Navigational Aids (NAVAIDS) and Abnormal Airport Environments (AAE)

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Airport owners must maintain and improve runways and taxiways, and as a result there will be occasional runway closures and temporary threshold relocations. During runway closures, personnel and equipment may be present on the runway, or there may be other conditions which make it unsafe for an aircraft to land. Pilots are notified of runway closures through a Notice to Airmen (NOTAMS), and notification on the Automated Terminal Information System (ATIS) where available. Airports will sometimes but not always mark the closed surface or relocated threshold. An airport with a closed or shortened runway surface is considered to have an AAE. An Instrument Landing System (ILS) that leads a pilot to a closed runway surface represents a case of hazardous misleading information.

It is the policy of WSA, Technical Operations, that any ILS servicing a runway must be turned off throughout the duration of scheduled closures to avoid hazardous safety risks during AAE. The glide slope must be shutdown when a runway threshold is displaced or relocated. In that case, the localizer may continue to operate. Exceptions to this policy are allowed, when agreed on in writing by Operations Engineering, Flight Standards, Flight Procedures, and Terminal Services.

Exceptions are appropriate when users and providers agree there may be a procedural benefit to leaving the instrument guidance in place. A NAVAID is procedurally beneficial when it improves air traffic or Instrument Flight Rule (IFR) services (e.g. circling minima, localizer-only minima, approach separation, etc.). For example, a localizer is capable of bringing an aircraft below weather so that they can circle to an adjacent runway. Exceptions for glide slopes will be very rarely granted. In all cases, WSA Technical Operations must assure that construction activities will not degrade the ILS signals. For example, the presence of fill used for compaction or construction materials and equipment can degrade the accuracy of ILS signals.

Temporary runway closures which cannot practically be scheduled in advance, and that are of very limited duration, represent a blanket exception to this policy. Some examples are: runway inspection, snow removal, or disabled aircraft. These closures are limited in duration and are not scheduled far enough in advance to provide an opportunity to shut off the navigation systems.

Please refer any questions to Calvin Ngo, Operations Engineers/NavAids Support Center Manager, AJW-W15A, at (425) 227-2345 or Greg Weatherford, at (425) 227-2353.



## Federal Aviation Administration

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### Memorandum

Date: NOV 17 2008

To: Managers, District Offices, Technical Services, Technical Operations, Western Service Area (WSA)

From: Manager, Engineering Services, Technical Operations, WSA

A handwritten signature in black ink, appearing to read "R. Kitten", is written over the "From:" line.

Subject: Visual Glide Slope Indicators and Abnormal Airport Environments (AAE)

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Airports owners must maintain and improve runways and taxiways, and as a result there will be occasional runway closures and temporary threshold relocations. During runway closures, personnel and equipment may be present on the runway, or there may be other conditions which make it unsafe for an aircraft to land. Pilots are notified of runway closures through a Notice to Airmen (NOTAM), and notification on the Automated Terminal Information System where available. Airports will sometimes but not always mark the closed surface or relocated threshold. An airport with a closed or shortened runway surface is considered to have an AAE.

Visual Glide Slope Indicators (VGSI) help pilots establish a stabilized approach at altitudes above terrain. These facilities are critical safety aids and help prevent accidents. A pilot using these aids for navigation expects to land safely at the touchdown point. When a surface is closed leaving the visual glide slope operating, this may lead the pilot to believe that it is safe to land. This is an erroneous indication which meets the definition of hazardously misleading information. If an aircraft lands on the runway, they may encounter obstacles or other hazardous conditions. It is not uncommon to find, after an incident, that a pilot has failed to review the NOTAM for the airport. The Office of Runway Safety has seen cases of pilots landing on closed runways or closed portions of runways where the VGSI has been left operating.

It is the policy of the Flight Standards Divisions in AAL, ANM, AWP, and WSA Technical Operations, that any VGSI servicing a closed runway MUST be turned off or disabled throughout the duration of the closure to avoid hazardous safety risks during AAE. A visual aid may be disabled by having airport operations cover the lights so the indicators are not visible to pilots. Exceptions are allowed when agreed on by Operations Engineering, Flight Standards, Flight Procedures, and Terminal Services. Exceptions shall be documented in writing.

Temporary runway closures that cannot practically be scheduled in advance, and that are of very limited duration, represent a blanket exception to this policy. Some examples are: runway inspection, snow removal, or a disabled aircraft. These closures are limited in duration and are not scheduled far enough in advance to provide an opportunity to shut off the navigation systems.

Please refer any questions to Calvin Ngo, Operations Engineering/NavAids Support Center Manager, AJW-W15A, at (425) 227-2345 or Greg Weatherford, at (425) 227-2353.